

EXPERIMENT

3.1 Uniform Motion**Observations and Data****Table 1**

Time (interval)	Displacement (cm)	Average velocity (cm/interval)	Total displacement (cm)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Analysis

1. On a sheet of graph paper, plot the velocities (vertical axis) versus the corresponding time intervals (horizontal axis). Be sure that each graph you plot in this experiment has a title and that all axes are properly labeled.
2. Write an explanation for what the graph shows. Point out any location on the graph that shows constant velocity or changing velocity. Calculate the vehicle's average velocity for the entire trip. How does it compare to the velocities during each interval? Using a colored pencil or a pen, draw a line on your graph indicating this average velocity.
3. On another sheet of graph paper, plot the total displacement (vertical axis) versus the time intervals (horizontal). Use the same size scale on the x-axis for time intervals as you did for your preceding graph.